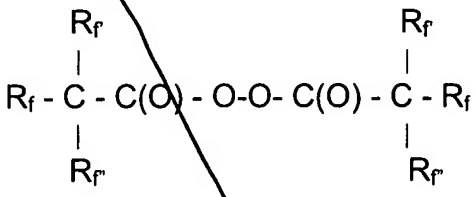
5. (Amended) A polymerization process according to claim 2, wherein at temperatures of the order of -20° - +25°C, the perfluorodiacylperoxides of structure (A) of formula:



are used, wherein when R_f is $-CF_3$, $R_{f'}$ and $R_{f''}$ are C_1-C_3 linear or branched perfluorooxyalkyl groups.

6. (Amended) A polymerization process according to claim 2, wherein the fluorinated monomers are selected from:

- C_2-C_8 perfluoroolefins, such as tetrafluoroethylene (TFE), hexafluoropropene (HFP);
- C_2-C_8 hydrogenated fluoroolefins, such as vinyl fluoride (VF), vinylidene fluoride (VDF), trifluoroethylene, CH_2=CH-R_f perfluoroalkylethylene, wherein R_f is a C_1-C_6 perfluoroalkyl, hexafluoroisobutene;
- C_2-C_8 chloro-fluorolefins, such as chlorotrifluoroethylene (CTFE);
- CF_2=$CFOR_f$ (per)fluoroalkylvinylethers (PAVE), wherein R_f is a C_1-C_6 (per)fluoroalkyl, for example CF_3, C_2F_5, C_3F_7;
- CF_2=CFOX (per)fluoro-oxyalkylvinylethers, wherein X is: a C_1-C_{12} alkyl, or a C_1-C_{12} oxyalkyl, or a C_1-C_{12} (per)fluorooxyalkyl having one or more ether groups;
- perfluorodioxoles, such as 2,2,4-trifluoro-5-trifluoromethoxy-1,3-dioxole (TTD), 2,2-bis-trifluoromethyl-4,5-difluoro-dioxole (PPD);

- sulphonic monomers, such as $CF_2=CFOCF_2CF_2SO_2F$;

- fluorinated dienes such as $CF_2=CFOCF_2CF_2CF=CF_2$, $CF_2=CFOCCl_2CF_2CF=CF_2$, $CF_2=CFOCF_2OCF=CF_2$, $CF_2=CFOCF_2OCCl=CF_2$, $CF_2=CFOC(CF_3)_2OCF=CF_2$.

7. (Amended) A polymerization process according to claim 2, wherein the perfluorodiacylperoxide initiator is fed in a continuous way or by a single addition at the starting of the polymerization.

8. (Amended) A polymerization process according to claim 2, wherein the amount of perfluorodiacylperoxide initiator is in the range 0.0001% - 5% by moles with respect to the amount of the fed monomers.

REMARKS

Claims 1-8 are pending in this application. By this Amendment, claims 4-8 are amended to correct the multiple dependencies thereof and to place this application into better condition for examination. No new matter has been added.